UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III



Environmental Sciences Center 701 Mapes Road Fort Meade, Maryland 20755-5350

DATE:

March 7, 2012

SUBJECT:

Region III Data QA Review

FROM:

Colleen Walling

Region III ESAT RPO (3EA20)

TO:

Rich Fetzer

Remedial Project Manager (3HS31)

Attached is the organic data validation report for the Dimock Residential Groundwater site (DAS:# R33917; SDG: #480-16127-1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

MCA

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0042

TDF: 03014 Data Validation

TO: #0042

TDF: #02085 Sample log-in processing

cc: Gene Nance (Techlaw) Suddha Graves (Techlaw)

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

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ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597

Date:

March 07, 2012

Subject:

Organic Data Validation (M3 Level)

Case: R33917

Project: 480-16217-1

Site: Dimock

From:

Ex. 4 - CBI

Organic Data Reviewer

Ex. 4 - CBI

Senior Oversight Chemist

To:

Colleen Walling

ESAT Region 3 Project Officer

OVERVIEW

Third party Case R33917, Project 480-16217-1, consisted of thirteen (13) aqueous samples including two (2) field blanks analyzed for ethylene glycol. Samples were analyzed by TestAmerica Buffalo (TAL BUF) according to Test Methods for Evaluating Solid Waste SW-846 Method 8015B.

SUMMARY

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage_4 Validation_Manual). Areas of concern with respect to data usability are listed below.

MINOR PROBLEM

• The laboratory employed a four (4) point calibration curve for the analysis of the compounds requested; however, Method 8015B specifies the use of a five (5) point curve. No action was taken by the reviewer based on this deviation from the method.

NOTES

• Ethylene glycol failed precision criteria [Percent Difference (%D)] in a continuing calibration. No positive results were reported for this compound. Quantitation limits for this compound were not impacted since the %D did not exceed the 50% criteria.

DIM0184880 DIM0184881

Client: Techlaw, Inc.

Project/Site: TechLaw Project No. R33917 (EG only)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-16217-1	FB17	Water	02/14/12 09:09	02/16/12 10:00
480-16217-2	FB18	Water	02/15/12 09:45	02/16/12 10:00
480-16217-3	HW03 4	Water	02/14/12 15:18	02/16/12 10:00
480-16217-4	HW03Z	Water	02/14/12 15:19	02/16/12 10:00
480-16217-5	HW074	Water	02/15/12 11:36	02/16/12 10:00
180-16217-6	HW114	Water	02/13/12 15:05	02/16/12 10:00
480-16217-7	HWII-P	Water	02/13/12 15:22	02/16/12 10:00
180-16217-8	HW53	Water	02/13/12 14:57	02/16/12 10:00
180-16217-9	HW53-P	Water	02/13/12 15:17	02/16/12 10:00
180-16217-10	HW57 以	Water	02/14/12 10:07	02/16/12 10:00
180-16217-11	HW57-P	Water	02/14/12 10:31	02/16/12 10:00
80-16217-12	HW58 4	Water	02/14/12 14:47	02/16/12 10:00
180-16217-13	HW59 V	Water	02/14/12 10:33	02/16/12 10:00

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TestAmerica Buffalo 2/22/2012

Week 4

2. <u>HPC Holding Times</u>: The 8-hour holding time for HPC was exceeded for 15 of the 17 samples. Those samples exceeding the holding time are highlighted in gray below. Depending on other water quality factors an extended holding time may cause the number of bacteria present to increase, decrease, or remain unchanged. Results therefore are estimates and may be biased high, low, or not affected.

FB16	HW03	HW11	HW27Z	HW55	HW58
FB17	HW03Z	HW1 IP	HW53	HW57	HW59
FB18	HW07	HW27	HW53P	HW57P	

3. <u>HPC Method Blanks</u>: A method blank (or agar sterility control plate) was not included with each series of samples plated. Consequently, without a clean method blank showing no growth, the HPC results obtained could be due to contamination of a sample during analysis at the bench. The results (of samples in gray) cannot be validated.

FB16	HW03	HW11	HW27Z	HW55	HW58
FB17	HW03Z	HW11P	HW53	HW57	HW59
FB18	HW07	HW27	HW53P	HW57P	1

HPC Agar Positive Control: No agar batch positive control results were provided in the QC data package.
 Results for all samples (highlighted below in gray) are affected and may be biased low, especially results indicating <1 CFU/mL.

FB16	HW03	HW11	HW27Z	HW55	HW58
FB17	HW03Z	HWIOP	HW53	HW57	HW59
FB18	HW07	<u>H</u> W27	HW53P	HW57P	

Conclusions

Table 1. presents the final data qualifications for Week 4 samples where they apply. The number in parentheses corresponds to the data quality issue discussed above. (The numbers are not related to issues listed in other data validation reports.)

Table 1. Data Qualifiers - Week 4

SAMPLE	QUALIFIERS for TC/FC DATA	QUALIFIERS for HPC DATA	
	ICICDAIA	}	
FB16		R (3)	
FB17	K(1)	R (3)	
FB18		R (3)	
FB03	K(1)	R (3)	
HW03Z	K(1)	R (3)	
HW07		R (3)	
HWII	*	R (3)	
HW11P		R (3)	
HW27		R (3)	
HW27Z		R (3)	
HW53		R (3)	
HW53P		R (3)	
HW55		R (3)	
HW57	K(1)	R (3)	
HW57P	K(I)	R (3)	
HW58	K(1)	R (3)	
HW59	K(1)	R (3)	